

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-24950; Directorate Identifier 2006-NM-036-AD; Amendment 39-14627; AD 2006-12-03]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-100B, 747-200B, 747-200F, 747-300, 747-400, 747-400F, and 747SP Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain 747-100B, 747-200B, 747-200F, 747-300, 747-400, 747-400F, and 747SP series airplanes. This AD requires doing inspections of the midpivot bolt and midpivot bolt access door of the spring beam of the inboard side of the outboard struts for discrepancies, installing a placard on the midpivot bolt access door, and applicable corrective actions if necessary. This AD results from reports indicating that the midpivot bolt and midpivot bolt access door of the spring beam of the inboard side of the outboard struts were installed in the incorrect position. We are issuing this AD to ensure that the subject midpivot bolts and midpivot bolt access doors are installed in the correct position. If not installed in the correct position, a midpivot bolt could be overloaded and crack or fracture, which could result in the loss of the spring load path and consequent separation of the associated outboard strut and engine from the airplane.

DATES: This AD becomes effective June 22, 2006.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of June 22, 2006.

We must receive comments on this AD by August 7, 2006.

ADDRESSES: Use one of the following addresses to submit comments on this AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590.

- Fax: (202) 493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Ivan Li, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6437; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Discussion

We have received reports indicating that the midpivot bolt and midpivot bolt access door of the spring beam of the inboard side of the outboard struts were installed in the incorrect position on two airplanes. On one of the airplanes, the midpivot bolts and midpivot bolt access doors had been installed during accomplishment of the modification of the nacelle strut and wing structure in accordance with Boeing Service Bulletin 747-54A2157 (required by AD 95-13-05, amendment 39-9285 (60 FR 33333, June 28, 1995)). Investigation revealed that the service bulletin specified incorrect part numbers for the midpivot bolt access doors. In addition, the production installation drawings did not provide clear instructions for installing the midpivot bolts and midpivot bolt access doors, which resulted in the discrepancies on the other airplane.

The midpivot bolt access door is attached to the skin of the inboard side of the outboard struts. A midpivot bolt access door has anti-rotation tabs that fit the slots of the midpivot bolt's head. If any midpivot bolt access door is not installed correctly or if its anti-rotation tabs are not properly aligned with the slots of the midpivot bolt's head, the midpivot bolt and its internal lubrication channel will not be in correct position. When the lubrication channel is not in the correct position, a midpivot bolt could be overloaded and crack or fracture. These conditions, if not corrected, could result in the loss of a spring beam load path and consequent separation of the associated outboard strut and engine from the airplane.

Relevant Service Information

We have reviewed Boeing Alert Service Bulletin 747-54A2225, dated February 16, 2006. The service bulletin describes the inspection procedures specified in the table below. The service bulletin also describes procedures for installing a placard on the midpivot bolt access doors, and doing applicable corrective actions if necessary. The applicable corrective actions include changing or replacing any midpivot bolt access door that is damaged or installed in the incorrect position with a new or serviceable midpivot bolt access door, and under certain conditions, replacing the midpivot bolt with a new bolt. The service bulletin specifies the following compliance time depending on the airplane configuration and accumulated flight cycles:

- "Within 24 months from the release date on this service bulletin or within 90 days from accumulating 8,000 flight cycles from the accomplishment of SB 747-54A2157, whichever occurs first;"
- "Within 24 months from the release on this service bulletin or within 90 days from accumulating 8,000 total flight cycles, whichever occurs first;" or
- "Within 90 days from the release date on this service bulletin."

INSPECTIONS

Doing—	Of—	For—
(1) A general visual inspection	The midpivot bolt access doors	The correct part number, damage (i.e., wear, nicks, gouges, elongated fastener holes, or cracks), or the correct position of its anti-rotation tabs.
(2) A general visual inspection	The anti-rotation tabs of the midpivot bolt access doors.	Damage (i.e., wear, nicks, gouges, or cracks) or any missing tab.
(3) A general visual inspection	The midpivot bolts	Correct position or damage (i.e., nicks, gouges, or cracks).
(4) An ultrasonic inspection	The midpivot bolts	Cracks.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA's Determination and Requirements of This AD

The unsafe condition described previously is likely to exist or develop on other airplanes of the same type design that may be registered in the U.S. at some time in the future. Therefore, we are issuing this AD to ensure that the subject midpivot bolts and midpivot bolt access doors are installed in the correct position. If not installed in the correct position, a midpivot bolt could be overloaded and crack or fracture, which could result in the loss of the spring load path and consequent separation of the associated outboard strut and engine from the airplane. This AD requires accomplishing the actions specified in the service information described previously, except as described under "Difference Between the Proposed AD and Service Bulletin."

Difference Between the Proposed Rule and Service Bulletin

Operators should note that, although the Accomplishment Instructions of the referenced service bulletin describe procedures for submitting a report of inspection findings to Boeing, this AD will not require that action.

Costs of Compliance

None of the airplanes affected by this action are on the U.S. Register. All airplanes affected by this AD are currently operated by non-U.S. operators under foreign registry; therefore, they are not directly affected by this AD action. However, we consider this AD necessary to ensure that the unsafe condition is addressed if any affected airplane is imported and placed on the U.S. Register in the future.

If an affected airplane is imported and placed on the U.S. Register in the future, the required inspection and installation of a placard would take about 6 work hours per airplane, at an average labor rate of \$80 per work hour. Based on these figures, the estimated cost of the AD would be \$480 per airplane.

FAA's Determination of the Effective Date

No airplane affected by this AD is currently on the U.S. Register. Therefore, providing notice and opportunity for public comment is unnecessary before this AD is issued, and this AD may be made effective in less than 30 days after it is published in the Federal Register.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any relevant written data, views, or arguments regarding this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2006-24950; Directorate Identifier 2006-NM-036-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD that might suggest a need to modify it.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78), or you may visit <http://dms.dot.gov>.

Examining the Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after the Docket Management System receives them.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

U.S. Department
of Transportation
**Federal Aviation
Administration**



2006-12-03 Boeing: Amendment 39-14627. Docket No. FAA-2006-24950; Directorate Identifier 2006-NM-036-AD.

Effective Date

- (a) This AD becomes effective June 22, 2006.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Boeing Model 747-100B, 747-200B, 747-200F, 747-300, 747-400, 747-400F, and 747SP series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 747-54A2225, dated February 16, 2006.

Unsafe Condition

(d) This AD results from reports indicating that the midpivot bolt and midpivot bolt access door of the spring beam of the inboard side of the outboard struts were installed in the incorrect position. We are issuing this AD to ensure that the subject midpivot bolts and midpivot bolt access doors are installed in the correct position. If not installed in the correct position, a midpivot bolt could be overloaded and crack or fracture, which could result in the loss of the spring load path and consequent separation of the associated outboard strut and engine from the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Inspections

(f) Do the inspections specified in Table 1 of this AD at the applicable compliance time listed in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-54A2225, dated February 16, 2006; except, where the service bulletin specifies a compliance time from the release date of the service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD. Do the inspections in accordance with the Accomplishment Instructions of the service bulletin.

TABLE 1.—INSPECTIONS

Do—	Of—	For—
(1) A general visual inspection	The midpivot bolt access doors	The correct part number, damage (i.e., wear, nicks, gouges, elongated fastener holes, or cracks), or the correct position of its anti-rotation tabs.

Do—	Of—	For—
(2) A general visual inspection	The anti-rotation tabs of the midpivot bolt access doors.	Damage (i.e., wear, nicks, gouges, or cracks) or any missing tab.
(3) A general visual inspection	The midpivot bolts	Correct position or damage (i.e., nicks, gouges, or cracks).
(4) An ultrasonic inspection	The midpivot bolts	Cracks.

Note 1: There is a discrepancy in Step 2 of Figure 13, Sheet 2, of Boeing Alert Service Bulletin 747-54A2225, dated February 16, 2006. The "MORE DATA" column of the table incorrectly describes the anti-rotation slot installation as being "horizontal and are perpendicular to the strut skin aft edge." The correct description is "vertical and are parallel to the strut skin aft edge."

Installation of a Placard and Corrective Actions

(g) Before further flight after doing the inspections required by paragraph (f) of this AD, do the applicable actions specified in Table 2 of this AD in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2225, dated February 16, 2006.

TABLE 2.—INSTALLATION OF A PLACARD AND CORRECTIVE ACTION

If—	And if—	Then—
(1) Any midpivot bolt access door has the correct part number and no damage.	Its anti-rotation tabs are present, are in the correct position, and have no damage.	Install a placard on the midpivot access door.
(2) Any midpivot bolt access door has the incorrect part number and no damage.	Its anti-rotation tabs are present, are in the incorrect position, and have no damage.	Change the midpivot access door or replace it with a new or serviceable access door, and install a placard on the midpivot access door.
(3) Any midpivot bolt access door has the incorrect part number, any damage, or any damaged or missing anti-rotation tab.	None	Replace the midpivot access door with a new or serviceable door and install a placard on the door.
(4) Any midpivot bolt is in the correct position	It has no damage	No further action is required by this paragraph.
(5) Any midpivot bolt is in the incorrect position	It has no damage	Correct the midpivot bolt position.
Any midpivot bolt has any damage	None	Replace the midpivot bolt with a new bolt.

Replacement of Midpivot Bolt

(h) If any condition in paragraph (h)(1) or (h)(2) of this AD is found on any outboard strut, within 24 months after doing the inspections required by paragraph (f) of this AD, replace the midpivot bolt of the spring beam of the inboard side of that outboard strut with a new midpivot bolt, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2225, dated February 16, 2006.

(1) If any midpivot bolt access door of the spring beam of the inboard side of the outboard struts is found in the incorrect position (i.e., the midpivot bolt access door has the incorrect part number or its anti-rotation tabs are in the incorrect position) and if no damage is found on that bolt during any inspection required by paragraph (f) of this AD.

(2) If any midpivot bolt of the spring beam of the inboard side of the outboard struts is found in the incorrect position and if no damage is found on that bolt during any inspection required by paragraph (f) of this AD.

Parts Installation

(i) As of the effective date of this AD, no person may install, on any airplane, a midpivot access door, part number 65B89670-339, 65B89670-340, 654U6624-356, or 654U6624-357, unless it has been inspected in accordance with paragraphs (f)(1) and (f)(2) of this AD and found to have the correct part number for the door location, no damage, and no damaged or missing anti-rotation tab.

No Reporting

(j) Although the service bulletin referenced in this AD specifies to submit certain information to the manufacturer, this AD does not include that requirement.

Alternative Methods of Compliance (AMOCs)

(k)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Commercial Airplanes Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

Material Incorporated by Reference

(1) You must use Boeing Alert Service Bulletin 747-54A2225, dated February 16, 2006, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, WA 98124-2207, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on May 26, 2006.

Jeffrey E. Duven,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 06-5125 Filed 6-6-06; 8:45 am]

BILLING CODE 4910-13-P